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REGISTRATION BUREAU FOR DRAUGHTSMEN.

This bureau is established for the use of architects wanting draughtsmen and draughtsmen wanting positions, free of expense to either party.

All draughtsmen wishing positions must register in person in this office and answer the following questions:

Name and address?

Age?

Married or single?

Experience?

Name and address of last employer?

Salary expected?

References?

All architects wishing draughtsmen are invited to use this bureau.

PROFESSIONAL COMMENT.

BETWEEN academical efforts of contest or rivalry and those put forth in solving the practical problems of the day, whether in matters of politics, authorship or architecture, there is a wide gulf. We find the same separation of questions which are bracketed under "municipal socialism," as in those concerned in meeting the wants of the laboring classes, in social and political movements and in all artistic work. An idea or theory approves itself to the mind of the reformer, to the man of business, or the scientist or artist; but when it comes to be practically put to the test it is found wanting. So the mere speculator or inventor is ever trying to think of something, or to invent something that will revolutionize the age. In the architectural world we have just now the same divergence; we see men of ability and artistic skill endeavoring to set up a new standard or departure in art, while others are content to plod on and follow methods that have been tried and found serviceable. These are noticed in two or three new directions. There is the band of Art-craftsmen who are trying to set up a more honest standard of design and workmanship, but who find arrayed against them the bulk of their own profession backed by popular opinion; there are those who are bent on introducing some foreign style into our national art; others who are engaged in breaking with traditional church planning; others, again, who seek to introduce new materials or modes of construction. There are evidently three distinct kinds of competition: first, one of skill and knowledge; second, of material; third, of draughtsmanship; and we find many competitors giving themselves up to one or other of these kinds. The man who devotes himself to a careful study of existing buildings and types, and who produces a design which we may call learned and correct, or traditional, we should place under the first class named; the architect who endeavors to give us something fresh or original in plan or design, in the second; while the third class describes the architectural artist who sacrifices plan to clever and skillful draughtsmanship, and who stakes all on the artistic presentment. These three sorts of competitors are to be observed in many large contests. The character and motives in competition designs are different. So-called originality is often attempted at the cost of real worth and artistic excellence. In his "Seven Lamps," Ruskin says: "A day never passes without our hearing our architects called upon to be original and to invent a new style; about as sensible and necessary an exhortation as to ask a man who has never had rags enough on his back to keep out the cold to invent a new method of cutting a coat. Give him a whole coat first and let him concern himself about the fashion of it afterwards." So we argue that they who compete for new modes of planning churches for cramped sites or public buildings for any purpose should first endeavor to solve the plan and construction before they trouble about adopting any particular style, old or new. The same writer says truly: "A man who has the gift will take up any style that is going, the style of his day, and will work in that and make everything that he does in it look as fresh as if every thought of it had just come down from heaven. . . . Neither originality nor change are ever to be sought in themselves, or can ever be healthily obtained by any struggle or rebellion against common laws." The attitude of the student is often to obtain the most attractive result at the least cost; but, as the same author says: "We are none of us so good architects as to be able to work habitually beneath our strength." We see very few designs that show any study or thought. The labor is expended in attractive drawings and per-

spectives. All old work, it is well observed, has been hard work, while ours has the look of "money's work." We are afraid few of our modern competition designs exhibit any real effort. A plan is taken as a model and worked to, and the style with which such a plan has been associated is adopted. After these preliminaries the rest is a matter of mere draughtsmanship. There are those who think out a programme or a problem; others who work from the imagination, copy something that strikes them as good, and if it is not right, alter it till it is suitable for the purpose. The first plan is the method of the true master, though he may occasionally find inspiration in something that has been done before. The other mode of designing is apt to degenerate into copying—taking precedents and trying to make them fit the requirements. We are afraid the latter method is the more usual. It is easier to draw in something, to jump at a conclusion and to take all the risks. It saves thinking out the requirements, and with the adoption of the thought comes the expression or style as well; and this is the method most competitors adopt. Between the two extremes we look for progress. Those who are seeking for a new departure or standard in plan must not rely entirely upon the adoption of old styles. It is impossible to try to associate modern requirements with any old style. Competitors fail in the effort partly because they have no leisure to bring into harmony the natural dress of some remote art with our own buildings. It is equally difficult to think out a design that will express a new or original plan that will be acceptable to the public. These are the chief difficulties which competitors have to contend against.

THE Architectural Draughtsmen's Club was formed on November 7, 1903 in New York City with a membership limited strictly to Architectural draughtsman. The purposes of the new club are: Study, fellowship and mutual assistance. On November 8th 1903 a nucleus of thirty members adopted the above name and a constitution and elected the following officers and committees to carry on the work: President, Lester A. Cramer; Vice-President, Chas. H. Rosefield; Recording Secretary, Edwin H. Rosengarten; Corresponding Secretary, Walter Scott, 1133 Broadway; Treasurer, Jos. Henry Hudson; Chairman Current Work Committee, John F. Nolan; Chairman Entertainment Committee, A. Theo. Rose. A series of monthly sketch competitions is proposed, the first one being for a seal or emblem for the club. Competitions will be selected from time to time. At the start however it is not the intention to attempt competitions of too large or ambitious a character, but the work will be of simple, yet pure selection, so that all members may compete freely. In this connection it might be well to

state that the founders' idea as to purposes, work and membership, is quality rather than quantity. During June, July and August, trips to the country for sketching will be made, but no house meetings will be held. During the other nine months of the year meetings will be held the evening of the first Tuesday of each month.

ON account of cold weather one hears much about the want of employment for bricklayers and others. Any one residing in Stockholm during the winter months can see bricklaying carried on in hard frost as an everyday occurrence. The art of building stands very high in Stockholm, much of the work done being both ornamental and of excellent quality. A few years ago a series of experiments were carried out to decide the lowest temperature at which bricklaying might be effectively carried on. Three different temperatures decided on were 23°, 14° and 6° Fahr. The bricks and mortar were, as to quality and conditions, such as are commonly used in Stockholm. The walls thus erected during the winter were allowed to stand till the following autumn, when they were torn down and the results noted were that those built at 23° and 14° were perfectly satisfactory, the mortar being quite hard and sound and had to be scraped from the bricks. Those laid at 6° were not satisfactory; the mortar did not adhere to all the bricks, which lay loosely imbedded in it. These results tend to prove that without any special precaution as to material or labor bricklaying can be carried on in Stockholm at a temperature as low as 14° Fahr. or 18° of frost. Generally, it may be said that the mortar should be made in a room where the temperature is kept well above freezing point. The brick used in Sweden is of a light or porous character, which readily absorbs the moisture from the mortar. Hard pressed or calcined bricks and stonework generally are not



Architects of To-Day.

MR. GROSVENOR ATTERBURY.

suitable for building during frosty weather, but edgings or ornaments, etc., of such material can easily be dealt with by slightly warming them before bringing them into position. This can be done by keeping them a few days in a wooden shed heated by an open coke stove. In some cases it is found advisable to cover in with rough boarding the part of the wall where such stonework is extensive; then a very small coke fire is found sufficient to keep the temperature high enough to prevent any damage to the mortar. But although brick building can thus be carried on safely under any of the temperatures already named, this does not apply to plaster or cement work, which should not be done at or below freezing point, unless proper heating arrangements are made. In Stockholm fifteen or twenty years ago almost all building was broken off during four or five months every winter; it is now the exception that it is

hindered by frost more than a few days or a few weeks annually. The matter is summed up shortly thus: (1) The bricks should be porous and perfectly dry that they may readily absorb the moisture in the mortar; (2) the water, sand and bricks must all be heated.

THE NEW JERSEY ARCHITECTS' REGISTRATION LAW.*

THE question of registering or licensing architects, has been considered before in various ways, but let us to-night view the subject from the standpoint of those persons, happily few in number, who subject it to unfavorable criticism. This being our assumed attitude, we find our objections arranging themselves generally under the following heads:

FIRST. The Architects' Registration Law of this state is defective because certain persons who are not trained architects, but merely members of the building trades, can receive certificates to practice, as well as the most qualified men of professional attainment.

THE SECOND objection is similar to the first, namely, that numerous incompetents are dignified, in the eyes of the public, by the receipt of such certificates, while the leaders of the profession are demeaned by being compelled to obtain them. The tendency being the leveling up, in the esteem of the public, of all those who possess certificates.

THIRDLY, the possession of a certificate by an architect is worthless, because any builder not possessing one may draw plans for a building, or as many buildings as he may wish, and construct such erections himself or with the aid of his employees; thus the builder is left free to supplant the architect in the latter's proper sphere.

THE FOURTH objection is kindred to the third and may be stated generally as follows. Any owner may prepare plans for his own building, or he may engage anyone for this purpose even though that person be not an architect. The law only requiring that the owner must be aware of this latter fact. Under such conditions, it is asked, "of what value to the practicing architect is the possession of a certificate?"

FIFTHLY. The best men in the profession will not be benefited in their practice to the value of a penny, the smaller and weaker men only receiving the benefit. Therefore why should those who have good practices care to give the law their moral support?

SIXTH. The law will never raise the standard of the profession in any great degree by the institution of examinations, as the elite of the profession will always be in advance of the standards set up by such examinations. Again, architecture is one of the fine arts, and a man should not be compelled to submit to an examination as to his qualifications to practice it, any more than sculptors, painters and musicians should be forced to submit to examinations and obtain licenses before engaging in their respective branches of the arts. Or again, why should the artistic mind be obliged to encumber itself with information relative to prosaic questions of construction and sanitation, in order that an examination may be passed and permission received to indulge in a natural bent for pure design?

Before dwelling upon the objections above enumerated, or trying to answer them, let us fix in our minds the fact that a law should not be enacted simply to benefit a certain class of citizens of a state, at the expense of the community at large. This should be borne

in mind if at any time certain objections to the Architects' Registration Law is raised. Also let us bear in mind that a law cannot be retroactive in its operation. If these facts were firmly fixed in our minds, the reason for several seeming weaknesses of the present law would be apparent. But while the Registration Law cannot be primarily for the benefit of the Architects of this state, but must be for the protection of the public, let us examine into a few of its phases and see whether the architect does not incidentally reap some especial benefits along with the general benefits assured to every citizen of the state.

Let us now consider the objection raised to the law in its relation to the carpenter-architect. This is perhaps the question oftenest raised by the architect objector. Wise legal counsel has interpreted the law on this point. A builder who has become somewhat skilled in the art of planning buildings and has made it a practice to act in a position of trust as the owner's agent, is entitled to a certificate; discretionary powers being lodged in the State Board of Architects. Too much prominence is apt to be given to this feature of the law, as the builders who prepare plans are becoming yearly fewer and fewer in number, as modern business customs are against the continuance of the practice. It is a survival of a former condition, under which many creditable buildings were erected, and though the work of the carpenter-architect of to-day, in the matter of design, is almost uniformly bad, we must not forget the old Colonial work produced by the master builders of former times. The excellence of these works few trained architects of to-day can surpass and many cannot equal.

Any superficial critic should also be reminded that laws have to be enacted by legislators, who are representative men of a community. To the average body of legislators if the proposition were made to take one's freedom to employ, for the planning of a proposed building, a man skilled in the practical branches of the building business, and compel one to go to some member of a profession for which one has no great respect, so much indignation would be raised that it would take a very bold and not over-wise man to propose a law to that effect.

I have dwelt upon this point longer than it really deserves, as the carpenter-architects who have received certificates in this state are comparatively few and they are in business chiefly in those sections where such a condition of affairs is desired. In larger and more modern business communities the builder and the owner now see it to their mutual interest to have a third person prepare plans and specifications for, and superintend the erection of, any building. Hence the question is of very small importance, compared with the benefits conferred by the law.

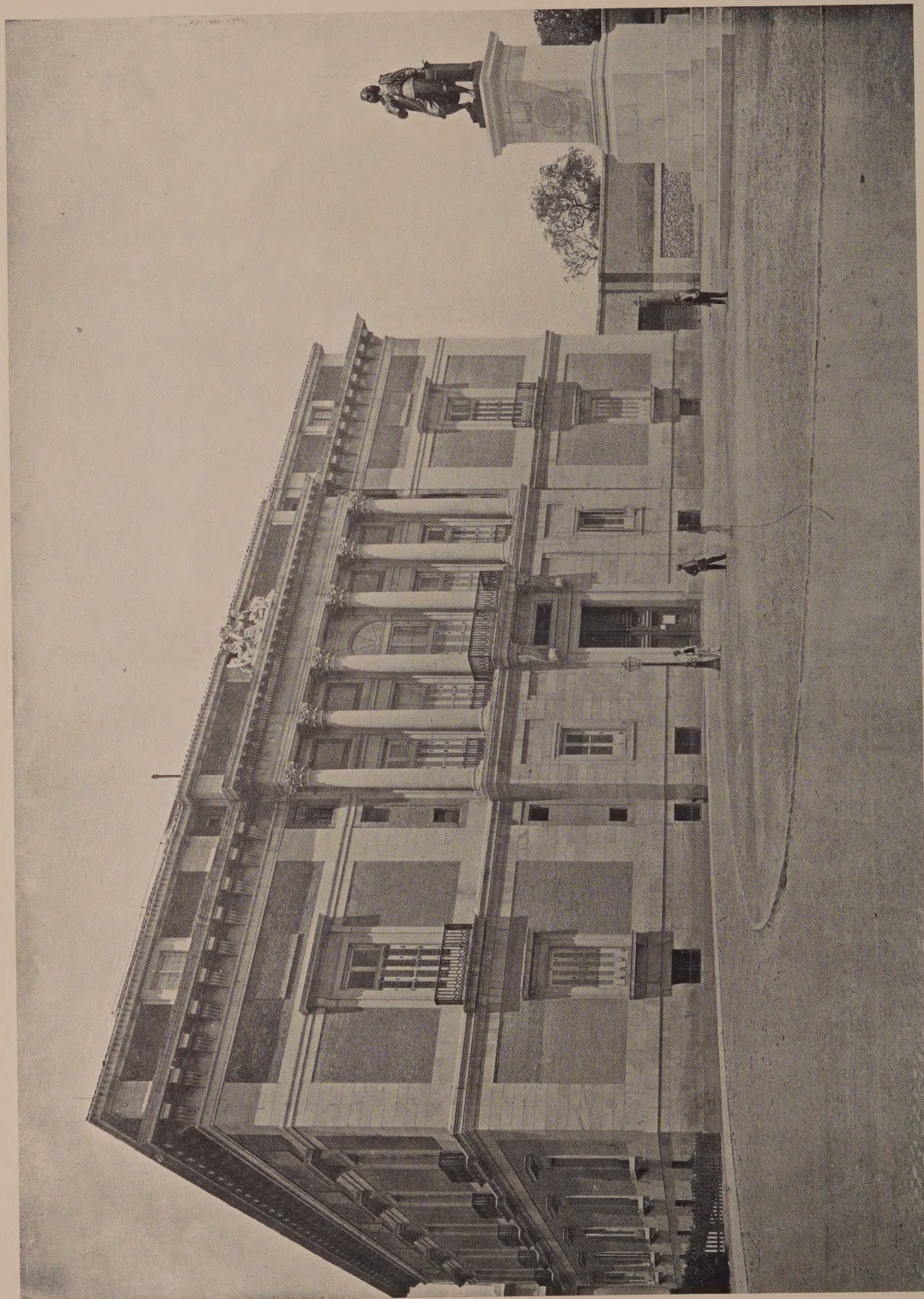
Now let us ask ourselves how the law on this point is of any incidental benefit to the registered architect.

The answer is much the same as on many similar points. The law does not *create* such a condition, but will better it. The number of carpenter-architects is no greater than before the passage of the law, and the operation of the law will prevent an increase in the number.

The other objection to the granting of certificates to incompetents can be answered in like manner. The law could not be made retroactive. By its operation the number of such practitioners will decrease much faster than is now generally realized.

As to the conferring of dignity upon such persons by the receipt of certificates, some consideration may be given this question. It is fair to assume, and there are indications that such is the case, that while the receipt of a certificate may elevate some men

*A paper read before the New Jersey Chapter of the American Institute of Architects by CHARLES P. BALDWIN, President of the New Jersey State Board of Architects.



THE NEW NATIONAL ART GALLERY AT MADRID.

unworthily, the logical result will be that the practices of such men will be elevated as well as themselves, particularly as the powers of revocation may be exercised and certificates made null and void for proper cause.

Thus the tendency will be to control an objectionable class of practitioners, by the operation of the law now in force, the public and the high-class practitioner being jointly benefited.

Regarding the alleged derogation of eminent practitioners, let us ask, "are prominent practitioners of law and medicine demeaned by possessing the same warrant to practice that their mediocre colleagues have?"

There will always be men, and classes of men, whose natural gifts and high ideals require no formal certification to assure the world of their true character. For such as these, registration and kindred laws are not enacted, and if all men were as these, such laws would not be needed.

The lawyers have had to pass through many of the troubles we architects are passing through, yet we all know that the legal profession still has its sharks, pirates and shysters. The medical fraternity is still at work endeavoring to bring the medical practice in this state up to the standard of certain other communities, and it is still troubled with its ex-drug clerks, herb doctors and quacks in general.

With such precedents, can we reasonably expect, in a few months, by the operation of any law to have all our peculiar troubles wiped away and the customs and prejudices of years yield to our preconceived notions of what should be accomplished? Can we expect a great commonwealth to take care of such troubles of ours as we should be willing to bear in common with all business men? Or again can we reasonably expect the legislature to create a monopoly for us, for the express purpose of putting dollars into our pockets? We all agree, it is hoped, that this is unreasonable to expect.

Let us now consider another alleged weakness of the law. It permits those builders who are not entitled to certificates as architects, under any provision of the law, to prepare plans for buildings and erect such structures with the aid of their employes. The question in one of its phases has already been considered to-night.

Such a clause was necessary to assure the passage of the act and although we may justly hold that the law would protect the public better without such a clause, let us see whether we are not better off in this particular than we should be without it. Please note that the builder must erect the building himself or with the aid of his employes. He must therefore be, it would seem, a general contractor, employing workmen for all branches of the building operations and assuming the entire responsibility for the structure erected. These limitations if enforced, will make the number of buildings erected under such conditions comparatively few. This class of builder must also refrain from calling himself "architect," thus bringing the profession unto disrepute.

As to the kindred objection that owners may prepare plans, and have buildings erected from them, we must consider as a necessary feature of the law to obtain its enactment. In this matter our law follows similar laws in other States. Let us ask ourselves, "how much of this kind of practice is likely to occur?" Few owners will avail themselves of this provision of the law, particularly in our larger communities, where the services of an architect are usual. The other feature of the same objection that an owner may employ anyone to prepare plans and specifications would seem at first sight to render nugatory the entire law, but when we look into

the matter carefully, we find that the incidental benefit to the architect in this particular is considerable.

Neither the owner nor the person engaged to prepare the plans and specifications of a projected building may call himself "Architect," thus sparing the profession much of humiliation it has been obliged to submit to in the past. The owner must bear the consequences of not taking customary precautions in the erection of his building, and the responsibility will deter many from assuming the risk. This has been known to occur in the short time the law has been in force.

But let us see whether the door is as wide open as it would appear at first sight, and whether this class of building operations will not be reduced greatly by the law's operation. By careful reading, we will find that the law will work beneficially for the registered architect, for the law distinctly says that anyone engaged in the *business* of preparing plans and preliminary data for buildings and not possessing a certificate as an architect is liable to the penalties of the law. This would seem to mean that while an owner may employ a cobbler to prepare plans for a building and take the consequences upon himself, the cobbler must not do the work under the name of "architect," but as a cobbler; furthermore even as a cobbler he cannot engage in the *business* of preparing plans without offending against the law. The preparation of plans for a building, on his part, must not be a *business*, but a mere incident in his life.

Logically the law hedges within such narrow limits this kind of practice that the public will get much better protection than heretofore, and incidentally the registered architect's benefits are too obvious to need specifying.

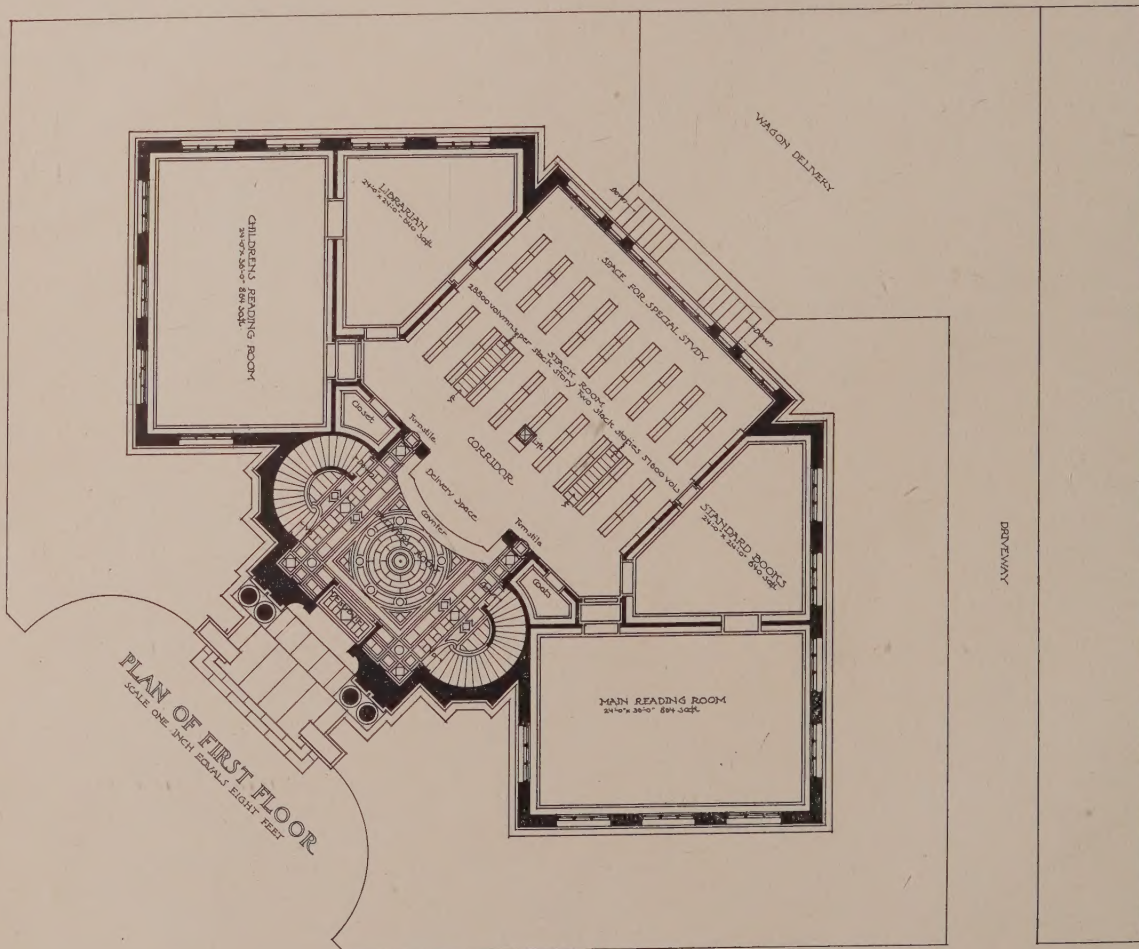
Thus you see that even here, in its weakest clause, the law will work beneficial results to all.

Next let us take up the objection that may be raised, that because the operation of the law will not aid the financial condition of architectural practitioners in general, and because the leaders in the profession need no examinations or certificates to determine, or vouch for, their abilities and requirements, therefore no genuine elevation of the profession will be accomplished by the operation of the law. It would be well to revert once more to the real purpose of the law. It is not in existence for the purpose of elevating any one set of men, but primarily to protect the public from incompetents. If all architects were Michael Angelos or Brunelleschis, it would not be necessary to protect the public by examination or registration laws, but because great genius transcends all ordinary laws and needs no certification of its presence, can it be said that those who constitute the rank and file of a profession need no restraint or elevation?

But by "genius" we must not confuse the architectural practitioner who talks of the kind of art that is written with a capital of heroic size, thinking thereby to mask his incompetency in those matters in which every architect should be prepared in the interest of his client. This kind of man, who poses among the water color drawings of his designs which could not be realized if they were executed in precious stones perpetually illumined by limelight, should be made to show by examination, that he possesses the requisite amount of constructive knowledge to protect the public and not disgrace his profession.

Such a man brings the architectural profession into disrepute in the eye of the public, more frequently than the carpenter-architect against whom he particularly rails.

A system which requires the aspirants to architectural practice to pass such examinations as will demonstrate that the man whose bent is toward construction and mathematics possesses a fundamental



GLOVERSVILLE PUBLIC LIBRARY, GLOVERSVILLE, N. Y.

Albert Randolph Ross, Architect.

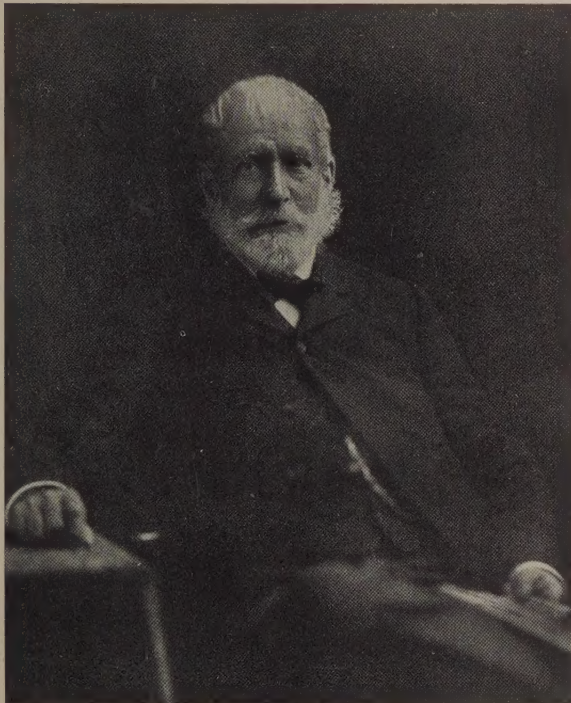
knowledge of design, and that the man of imagination and æsthetic tastes possesses such a knowledge of construction that he may be trusted to build safely for his clients, will certainly elevate in the due course of its operation the present condition of architectural practice. Those who may expect more than this would expect too much of any law that could be enacted.

The professions of law and medicine in this country have obtained public recognition for years; their members are generally highly-trained and able men, yet it is only of comparatively recent years that the public and these professions have had any protection from shysters and quacks.

Can the architects of this country, who are just gaining public recognition as professional men, reasonably expect to remedy in a few short months by the operation of a new law all the evils incidental to our unsettled conditions and heterogeneous make-up?

It can be safely predicted, nevertheless, that the benefits of the law will be seen at once, becoming more apparant as the years pass.

Let us therefore, if ever inclined to doubt the effectiveness of the Architects' Registration Law, look forward to the bright future, now dawning, in which the architectural profession will find itself elevated, in the esteem of the public, beside the professions of medicine and law.



PROF. WILLIAM R. WARE.

A TESTIMONIAL dinner was tendered Prof. William R. Ware at the Tavern Club, Boston, on the evening of November 28, by his oldest students of the Institute of Technology. The warm appreciation expressed by the Architects present of Prof. William R. Ware's services to the profession was outweighed by the feelings of loving gratitude of his students which quickly transformed the formal dinner. Several of Mr. Ware's songs written many years ago while at the Institute of Technology were

sung and the one below is doubtless familiar to many of our readers.

TWO RECEIPTS.

I.

If you want a receipt for the popular mystery
Commonly known as the Style of Queen Anne,
You must first study up architectural history,
And then mis-remember as much as you can!

Drawings and photographs, prints and descriptions
(Sift all the metal out and keep all the bran);
Temples and tombs of the ancient Egyptians;
Pagodas and such like about Hindustan;

Taverns and windmills; the Louvre and Tuileries;
Gothic cathedrals from Cork to Milan;
Domes and basilicas, prisons and pillories—
Houses of all sorts from here to Japan;

The wood-work of Cairo, the stucco of Cordova;
Chairs and four-posters the "Mayflower" brought over;
Every old tumble-down staircase and mantel-piece,
Sunflower griffen, or peacock-eyed fan-tail piece,—
Don't be particular as to the names,
Francis, Elizabeth, Henry or James;

Take of these elements all that's adaptable,
Likely to make habitations more hab'table;
Turn aside neither for reason nor witticism,
And the thing that you get will be far beyond criticism.

II.

Do you want a receipt for that capital article,
Known as Architect, Artist and Man?
Of every best thing take the very best particle;
Then let them beat the result if they can.

The classical taste of Italian Palladio;
Skill of Sir Christopher making a plan;
Knowledge of mortar and bricks, of a Paddy, oh;
Knowledge of style of Labrouste or Duban;

Judgment unerring in pictures, in pottery,
Patterns a Persian might paint on a pan,
Figures from friezes or carved terra-cotta-y,
Dainty designs for the face of a fan.

All one can master, at home or at college, he
Then must top off at the School of Technology;
Algebra, drawing and plane trigonometry;
German and French and descriptive geometry;
Graphical statics; dynamics,—a touch of them;
Physics and chemistry,—yet not too much of them;
Courage, ambition, and the love of the work;
Spunk of a Yankee and zeal of the Turk;

Take of these elements all that's most durable,
Cure all the faults that are not quite incurable;
Strain, and refine just as much as can be,
And the cream of the whole's the A. A. M. I. T.

A PHASE OF THE LABOR QUESTION.

Extracts from the letters of Mr. House Owner, a patient man, to his wife. He is his own contractor and did not know how many labor unions there were in the building trade.

MAY 12.

"Work on the cellar has not moved along quite so fast as I hoped; still, we are getting on. I went up early, and, instead of finding a gang of men, found only one man, a large fellow, wearing a heavy gold watch-chain. It appeared that he was the walking delegate of the Cellar Diggers' Union, and had heard that I was

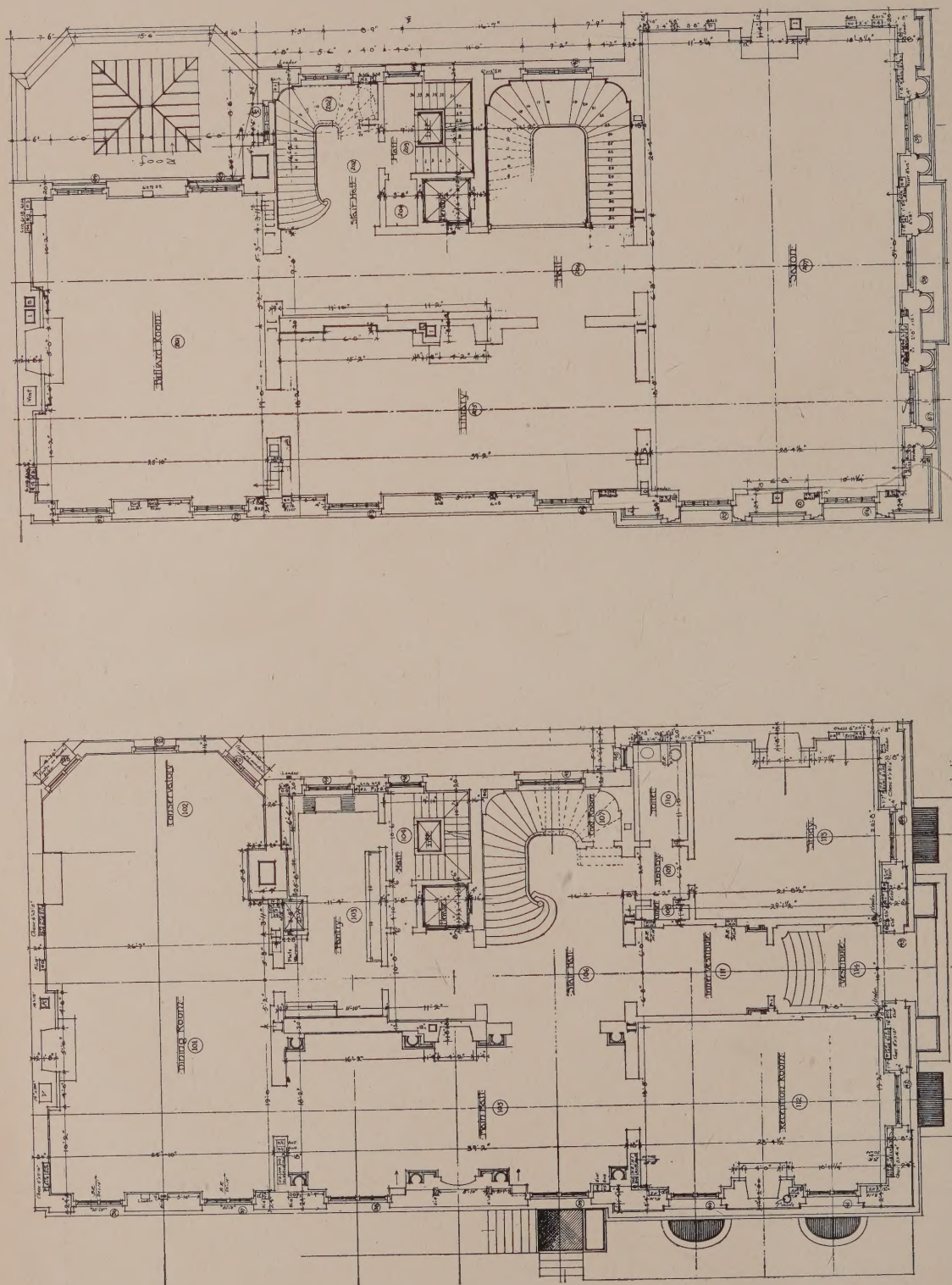
(Continued page 11.)



STABLE, C. K. G. BILLINGS, 195TH STREET AND FORT WASHINGTON ROAD, NEW YORK.



Guy Lowell, Architect. Richard L. Walsh, Builder.



FIRST AND SECOND FLOOR PLANS, RESIDENCE, JOHN H. HAMMOND, 9 EAST 91ST STREET, NEW YORK. (Plates II and III.) Carrere & Hastings, Architects.

(Continued from page 7.)

going to have the earth drawn away by non-union men, and he said he couldn't let his men work. I didn't know anything about what the teamsters were, and it took all day to find out. However, it was finally established that they belonged to the Team Drivers' Union, so it was arranged that the diggers should begin yesterday morning. They didn't do so, however, because the walking delegate of the Hat Workers' Union heard that I was wearing a non-union hat, and he came up to see about it. I let him explore the hat, and he found a lot of hieroglyphics under the band which I had never seen, and said it was all right and the men could begin at noon. They did so and work went on famously until three o'clock, when they came upon a stone about as big as a wash-tub, and all stopped. I asked what was the matter, and they said that if they rolled out the stone the Rock Hoisters' Union would protest, and they would lose their standing in the Combined Amalgamation of Excavators, so I shall have to engage a gang of rock hoisters to pry it out, after which I'm sure matters will move on again. I am determined to push the work with all speed."

MAY 13.

"We accomplished less to-day than I hoped, owing to the fact that the men came to a tree root, and I had to telephone the walking delegate to send up a member of the Tree Rooters' Union to remove it. The diggers and hoisters rested while this was going on, being afraid that he might be a non-union man, but after he proved to be all right they began again. Work went on swimmingly for a couple of hours, when a walking delegate for the Footwear Workers' Union came up and stopped everything on the ground that I was wearing non-union shoes. He said that if I would take 'em off he would see. I didn't like this very well, but I'm so anxious to get on with the house that I complied. He found them union made, and work began once more. The cellar goes on so slowly that I've decided to have the carpenters I've engaged, begin work to-morrow on the barn. I think I'd better have some cement walks laid, too, as the walking delegates are tramping down all the grass."

MAY 17.

"I have been too busy to write as often as I wished. Have had bad luck with the barn. When the carpenters came and found what I wanted them to work on, they were quite indignant—said I would have to get men belonging to the Barnsmiths' Union to do the work. I did so, and a start was made, when a walking delegate from somewhere came along and ordered the men to "knock off" because the lumber I had got was made from trees cut with axes fitted with non-union handles. It didn't make much difference, however, as the next day the Conglomerated Aggregation of American Building Constructors ordered a general strike, and everything has stopped. Thought it would be a good time to dig the well, and have men from the Well Diggers' Union at it, assisted by representatives from the Well Rock Hoisters' Union and the Well and Cistern Tree Rooter's Federation. I forgot to say that the cellar is done. And just this moment I heard that the chicken-coop and hen-housesmiths are not included in the general strike, so I can push work on our poultry building."

JUNE 10.

"Matters have been progressing rather so-so. The Well and Cistern Tree Rooters' Helpers struck, and as the men wouldn't

root with non-union helpers, the work stopped for several days. But the well is done at last, and by great good luck, between strikes, I got the cellar wall finished. The cellar had caved in on one side, but I got men from the Caved-in Cellar Repairers' Union, and this was soon remedied. The poultry house lags, however, since the smiths could put it up only in a general way, as it were, both the hen-house shinglers and the chicken-coop door hangers being out in the general strike. But I wish you could see the cellar—all completed, and really a very snug, cosy and homelike cellar it is, too."

JUNE 20.

"Matters stand much as they did. It's a beautiful cellar, and the hen-house is all right, so far as it goes. There are a good many walking delegates about, and yesterday one of them fell into the well. I pulled him out. Now I hear he's in trouble with his organization because he let a non-union man rescue him. It's his own affair, and I shan't worry. I understand that the Rafter Raisers and Roofers' Union has settled its grievance and been released from the strike. If I can hit on some plan to hold our roof up I think I'll have it made. It would be so much done. I have it now! I'll get men from the Flag Pole Setters' Union to put up a pole at each corner of the cellar, and then have the roof put on these. After all, we are getting on, you see."

JULY 2.

"If you could only see our house now! I have carried out the plan I mentioned, and have a splendid roof on the poles over the cellar. It looks a good deal like a mud-turtle on stilts, but its there, and its finished, and now all I've got to do is to fill in between the roof and the cellar, and there we'll be. I'm sure we're going to be very comfortable in our house. It's a good roof, and doesn't leak a drop. The cellar, too, doesn't leak a drop—all the rain has to be pumped out. Shall I have the dining-room ceiling a light buff, or would you prefer a pale blue? It is announced positively that the whole strike will be declared off September first. Nothing can be done before that, but then you'll see things hum. I'll have that roof and cellar connected with the house almost before you know it. Don't forget to tell me about the ceiling."

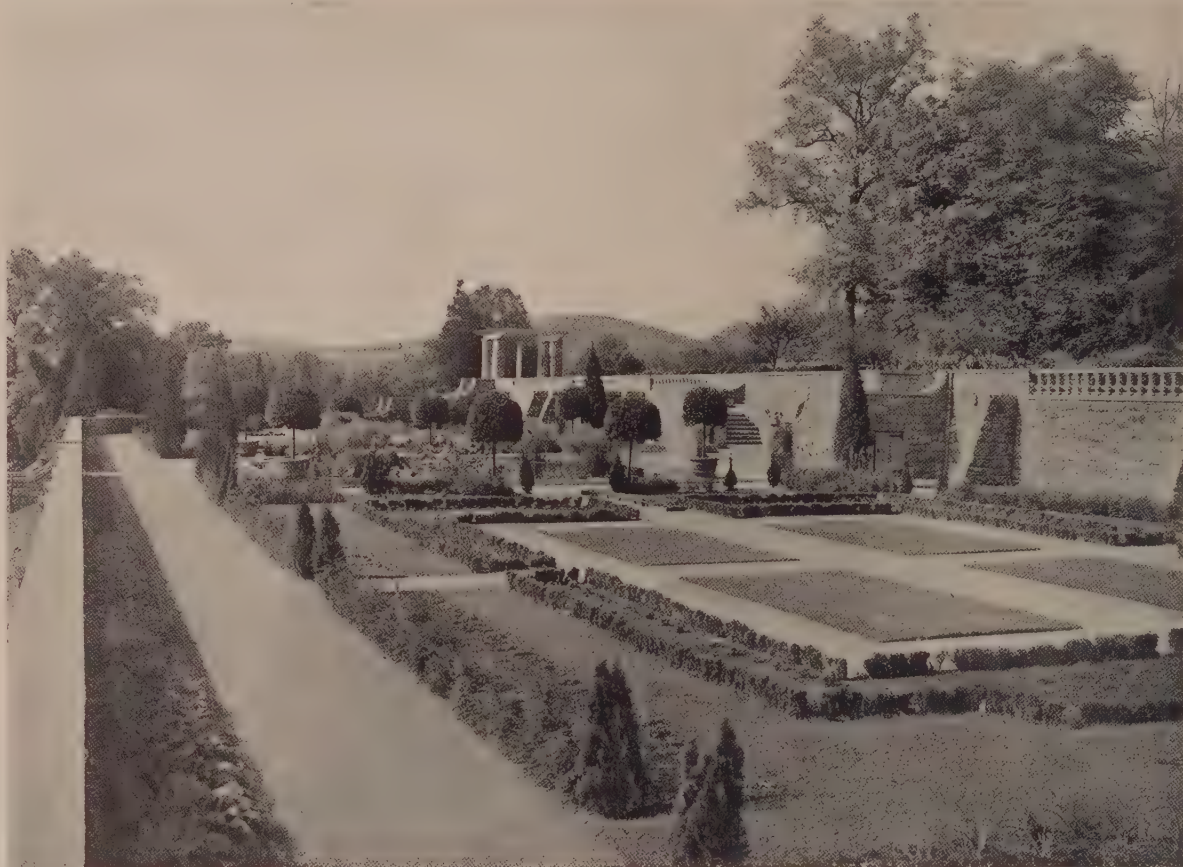
SEPTEMBER 2.

It's all over. Please come home as soon as you can. Have taken our old flat for another year. The strike was settled yesterday, as promised, but it seems that the walking delegates have discovered that there was a boycott on the agent who sold me the land, on account of his riding in a street-car last winter when there was a strike of the conductors, so the union will have nothing more to do with the house. Have sold the roof for kindling wood and gave the cellar to the fresh-air fund."—*The Smart Set*.

THE SOLUTION OF BUILDING PROBLEMS.

J. R. Ross.

THE problem of how to plan economically and for specific purposes, and to construct on scientific and hygienic principles, is being attacked on various sides by scientific men and experts. Each body of expert explorers is trying to solve the problem in its own way, without any reference to other individuals who are doing the same thing. Thus, for instance, we have the heating and sanitary experts laying down precise and absolute principles



FORMAL GARDEN, J. TOLMAN PYLE, MORRISTOWN, N. J.

Daniel W. Langton, Landscape Architect.

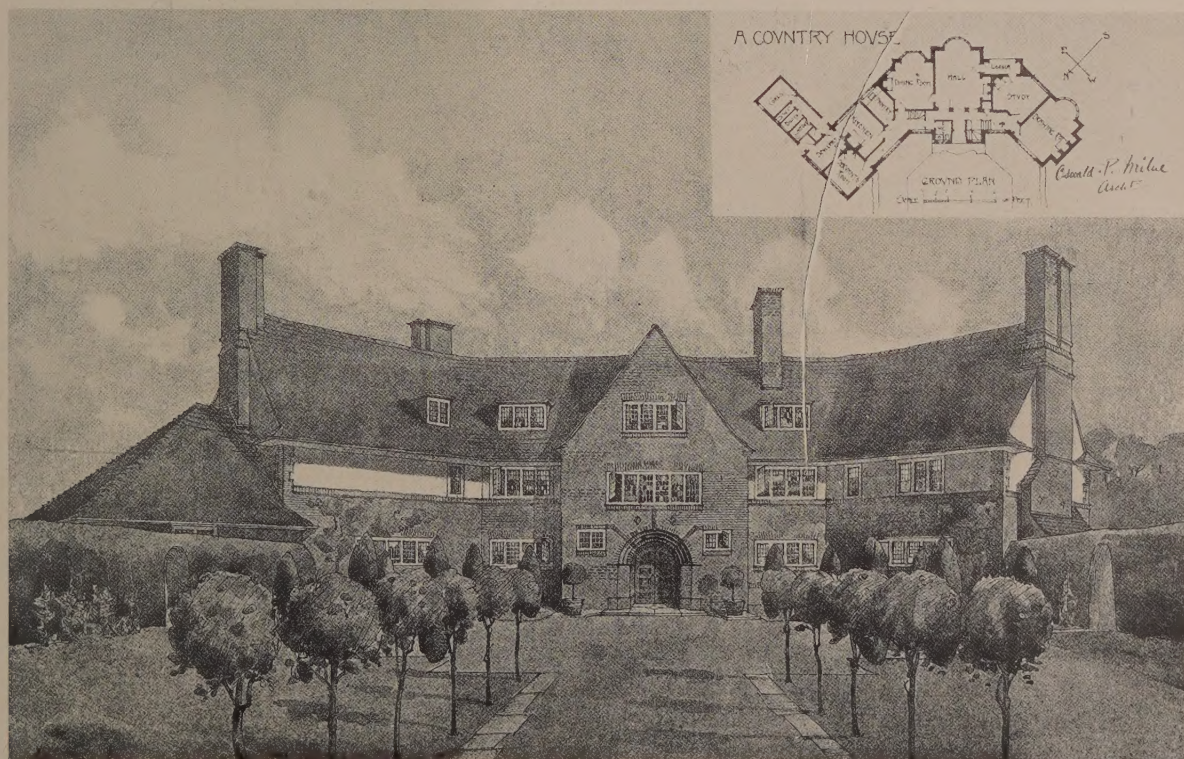
about drainage, warming and ventilation, just as if these matters, important as they are, were supreme, to which all other considerations must give way. They deduce from certain facts and experiences rules which they think must be obeyed at all costs. For example: A certain theory of ventilation must be carried out, no matter how it conflicts with architectural design or proportion; the sanitarian thinks, indeed, that plan and architectural features must give way to the rules of sanitary science as understood. Take, again, the mechanical expert who sees nothing but the design of a building being made to conform to its mechanical equipments, motors—mechanical plant and appliances for certain industries or manufacture; or the structural engineer, whose idea of design is that every portion of a building must be planned and arranged so as to give facilities for iron or steel construction—that the plan ought to be arranged by the engineer to suit the piers and columns, loads, length of girders and other convenient stock lengths and sections. The engineer's method of solution is one that does not often accord with the architectural sense. He considers every part of the design must be in strict relation to the utilitarian purpose, even if such use compels him to abandon architectural appearances and rules and to adopt unsightly features and proportions. To the barest mathematical result everything must be sacrificed. Then there is the specialist in a particular branch of architecture, who sees everything with the eyes of one who looks at a building from his own particular point of view and studies it in plan and elevation to accord with the latest ideas of a theatre, a church, a hospital or a library. The specialist's idea is rather restricted on this account:

he is not likely to take into consideration the conceptions of plan which commend themselves to the ordinary architect, or which, after all, may be better than his own in many respects. The regulation plan is everything and, according to him, cannot be made more perfect. Data derived from statistics are closely followed in plan, even where contradictory considerations tell against them. The specialist in fire-resisting construction is strongly wedded to ideas of steel and concrete, to modes of floor and staircase construction which are not generally disputed and shuts his ears whenever any other system is broached. The expert in planning is also inclined to waive points of artistic value. Considering only the question of plan, he is inclined to neglect the requirements of elevation and detail. In this respect he often exhibits a want of the sense of proportion in his design. Good arrangement, excellent as it is, can be carried so far that external composition and grouping are lost sight of. No doubt it is a better way of attacking the problem than in the other cases we have mentioned, as plan really lies at the root of good design. Other instances of solving the problems of modern building by scientific methods may be mentioned; but they all leave something to be desired not dreamed of in the philosophy of science. In the design and construction of buildings like hospitals and other institutions of an official and administrative kind we owe much to the study and statistical researches of experts. Economy of construction and plan and the conditions of health and safety against disease and fire have been promoted by their aid. Science has formulated methods of construction which cannot be disputed even if they are not the most perfect and

convincing from other points of view, or even, as they often do, set art at defiance. On these points there is something to say. Have these various solutions of modern architectural problems been of value to the art? Have they helped to improve architecture?—have they evoked any corresponding feeling for art? Has the artistic mind been responsive to scientific specialism? These are questions that largely rest with the profession. In each of these different ways valuable results have been obtained, but the general effect has been sometimes disastrous. Each of the many problems of municipal building has been attacked from one side only—the utilitarian or scientific, leaving the other sides of the problem untouched, and thus, while it is true that many useful improvements in plan and construction have been made, the effect on each class of building has been to produce an imperfect and ill-balanced whole. The scientific and technical elements have been developed at the expense of the æsthetic. From the materials used in the walls, floors and roofs down to the smallest detail of fitting or equipment there is the stamp of utility. Everything is moulded, cast and turned out by machinery; the locks, fastenings, gas and electric fittings manufactured for our buildings are perfect as contrivances for the end in view, but they are often inartistic. The stamp of commercial utility is on everything, even the decorative. The architect is powerless to do more than select the most suitable; he is unable to introduce his own views or any artistic reform. The expert in scientific construction or plan has no inclination to study other sides of the problem. It is impossible that one man can grasp the whole problem in its many-sidedness; but it is possible that the scientific expert may obtain the assistance of an artist who has some acquaintance with the particular class of building and that their co-operation may be the means of producing a design more worthy of the object. Co-operation in design is one of the ways

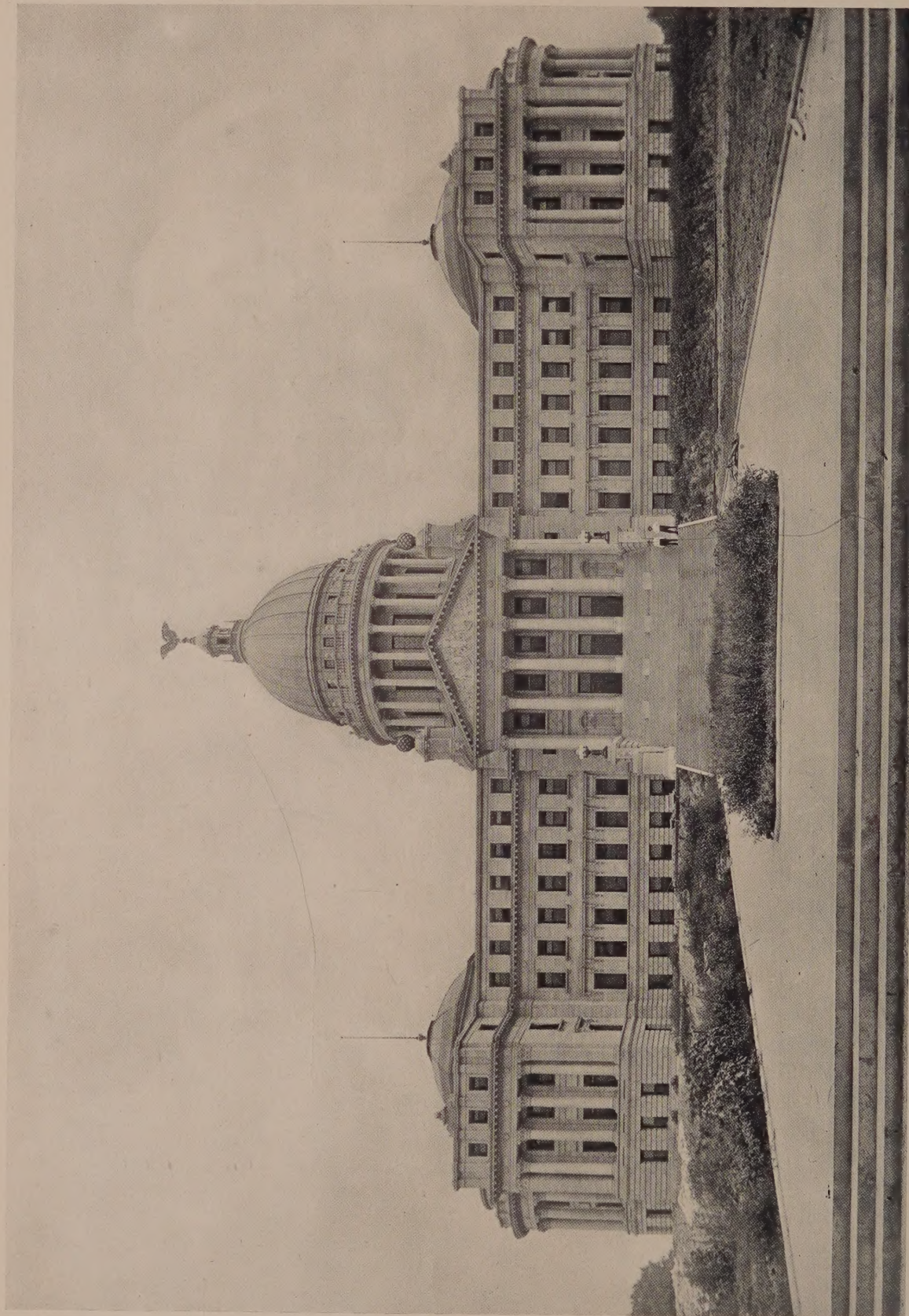
in which we think it is possible to overcome the evil we have mentioned. The designs for buildings of a special class intended for hospitals, schools and the like would be relieved of a good deal of their unsightliness, bareness and want of artistic treatment if they passed through two instead of one set of eyes. The bare engineering structure is a case in point. The engineer scrupulously follows the depths and sectional areas of his beams and columns and roofs, but does nothing to make them pleasing or architectural. If he were associated with an architect who had mastered the actual wants of the building, had studied ironwork, the result would be different. Many of the little amenities of design would be observed, proportions readjusted to meet architectural rules. Internally, instead of a chaos of materials and fittings juxtaposed without any feeling or sympathy, such as mahogany partitions "scribed" to the contours of plaster cornices and terra-cotta details; of iron columns abruptly terminating against an ornamental plaster ceiling and all kinds of ill-assorted fittings, we should get more harmony and architectural fitness. One writer on the subject of the design of the modern office building, discusses the qualifications necessary in the designer-in-chief of these buildings where there is so much of the engineering and technical. He says: "A type of mind unsuited for the position of designer-in-chief is that type which has no appreciation of art and beauty and has no other measures than those of economy and efficiency." Such a mind "misses the best solution, or possibly never attains it, in a problem of this character, by the narrow view it takes of the things with which it is not familiar and by reason of one-sided training is not fitted to be an intelligent and impartial judge of the various elements entering into a composite and complex design. The designer best qualified for this important position is evidently one who has a

(Continued page 16.)



DESIGN FOR A COUNTRY HOUSE.

Oswald P. Milne, Architect.



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Theo. C. Link, Architect, St. Louis, Mo.

Wells Brothers Company, Builders, 160 Fifth Ave., New York.



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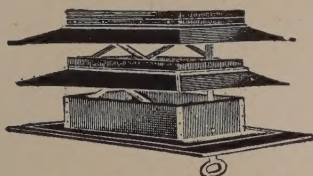
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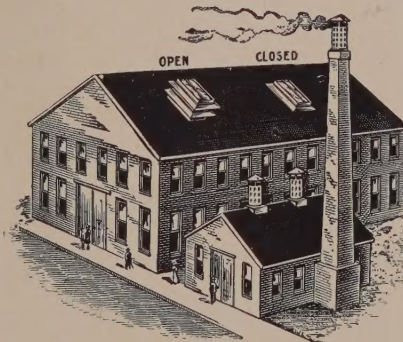
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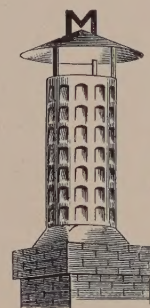
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(Continued from page 13.)

knowledge of the broad essentials and limitations of the various parts of the design, the judicial temperament permitting the balancing of an advantage against a disadvantage; a breadth of mind enabling a comprehensive view to be taken, coupled with courage and decision, with all these qualifications governed by a broad and catholic love of beauty in all its manifestations—not only of beauty of form and line, which is evident and can be comprehended, but of the more subtle beauty of science and its results.” Such a combination of qualifications is seldom realized, except in a few rare instances, as in the engineer or architect whose knowledge of facts and laws is accompanied with a broad knowledge of the fundamental requirements of art. The same writer, in analyzing these engineering architectural problems, says that a building of this kind is seen to admit of two main divisions: (1) the engineering design; (2) the architectural design. The first comprises all the structural and mechanical components, which include the foundation and superstructure, the stability against vibration and wind, resistance to fire and corrosion, also the planning of the floor areas and their subdivisions, supports, the position of lifts or elevators, lighting and heating systems, fireproofing and dust-proofing. The second division is made to include the treatment of facade arrangement of the windows and internal treatment of the offices. The architectural part of the work, he goes on to say, admits of a number of ways of solving the problem. Without materially affecting the structural or engineering design—that is to say, if there is only one structural solution—there are numerous architectural treatments possible, and therefore the chief aim should be to fix upon the engineering structural solution first and make the architecture conform to it. It is to find the right architectural treatment that is necessary. This argument may be open to question with those who believe there is only one possible architectural treatment for every building and who deny that architectural design is something elastic and can be fitted to suit any building. But if we make structural arrangement the basis of architecture, there can be only one treatment that is conformable to it. Directly we consider the engineering structure distinct from the architectural, it does not matter in what way we design the building. According to the twofold division we have given, the author adopts the latter theory. It is not the most satisfactory, but it practically illustrates these remarks. An architectural problem attacked on the engineering or utilitarian side, as we have imagined, does not give much hope of a satisfactory solution. The artistic side goes begging or is neglected altogether. In short, the solution is only a partial

and incomplete one; and it is so seldom that one man, an expert, combines both his own and the artistic sides of his vocation, and if he obtains assistance it is generally from one who has no sympathy for the particular object of the building. We think the latter is the most usual. Architectural specialists do not as a rule co-operate together. The architect must cultivate a knowledge of other professions and trades; he should see the danger of not learning something from scientific requirements, from medical, sanitary and artistic sides of the problem, so that it may not be worked independently from the outside to his detriment. So often a new movement is set up, and every new movement is a proof that something more is required than mere conventional usage, and if it is not recognized in time and accepted with a good grace, a profession springs up and appropriates the new idea or system to the disadvantage of the older profession.

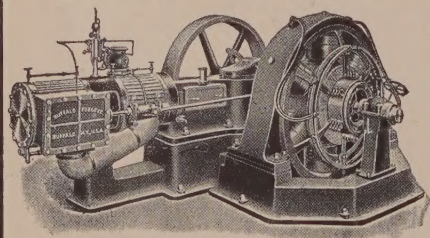
BOOK REVIEWS.

THE MECHANICAL ENGINEER'S REFERENCE BOOK. Henry Harrison Supplee, B.Sc., M. E. 1904. J. P. Lippincott Company, Philadelphia and London. \$5.50.

This work is principally devoted to the presentation of tables, formulae and reference data for mechanical engineers. In the portions relating to machine design it is full of such information as will render it useful in the draughting room and designing department. The book is supplied with a patent thumb index, a feature which adds materially to the usefulness of the work as a ready reference. Much information has been compiled and utilized from authoritative sources, with such modifications as are necessary to meet engineering problems and needs of the present.

STATELY HOMES IN AMERICA. 1903. Harry W. Desmond and Herbert Croly. D. Appleton & Company, New York.

Writers on domestic architecture have, heretofore, slighted or ignored the American Home. This may be ascribed to several good reasons; that creditable examples were rare, or that such good subjects as might exist could not be held as representative of a distinctive style in home building. America, with its cosmopolitan population, its extensive area and varied climatic conditions, has not and may not develop a general style or even kindred styles of architecture. No branch of the building art will depict special characteristics more vividly than the family residence. The conception of this book is excellent and the scope comprehensive, dealing with the high-class American home from the early colonial to the present time. It is profusely illustrated although the half-tone work lacks sharpness and detail. We are pleased to welcome into the architectural library a large and complete treatment of this timely and interesting subject, but it is only fair to say that the publisher has lost part of his opportunity in not presenting the work in a more durable and attractive form.

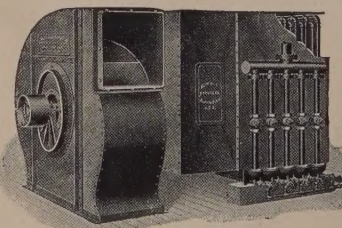


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